Final report template for Community Projects and Internet Research - to be sent to gertrud@internetnz.net.nz on the date specified in your contract

Grant reference number:	#PRS2201600010
Name of recipient	Brent Wood
Name of organisation (if	
applicable)	NZOSS
Title of project/records	Deploy and support an R-Shiny server for NZ
Title of project/research Amount of funding received	
	\$4500
Budget details	Donation for cloud service provider \$1000 Donation for sysadmin support \$1250 Donation for web page/brochure support \$1250 Project admin/printing/ \$500
	Total costs: \$4000 Total funds: \$4500
	Underspent: \$500 The surplus funds will be spent this year as further donations to the volunteers supporting this project.
	A robust Siny server has been deployed, with test applications installed and operational. The project objectives have been met.
Project/research approach and methods	The project was proposed only after initial agreement for server facilities and suitably capable and enthusiastic volunteers had been found for:
	system setup, administration and maintenance; web sites and publicity development; Shiny server support and development

	A problem I have experienced with previous similar volunteer initiatives is the loss of volunteers due to changing priorities – a genuine long term committment can be difficult to sustain. The donations made possible by the Internet NZ funding have helped ensure an ongoing commitment to this project is ensured, to assure the project of ongoing support, even without ongoing funding.
Summary of project/research outcomes	Keeping to timelines was difficult, but the people involved have committed time and resources to this project, and it has progressed to become a useful resource.
	We are currently publicising the server, and seeking more Shiny applications to deploy on this system.
Achievements	The initial Shiny application installed to provide proof of concept, was developed by Horizon's Council with MfE. It was installed with the enthusiastic support and full permission from these agencies. One initial technical issue (minor but critical) was addressed within 24hrs by the Shiny developers. This application runs noticeably faster on this server than the system it was originally deployed on and took less than an hour to deploy to an operation state, indicatinging the specifications of the server and the approach take to implement it do meet the core requirements.
	developed by GNS, was also deployed very easily and is fully operational.
Difficulties	I was away from NZ for some of the year, so managing the project and sustaining good communications was difficult at times, but the team is aware of this and we work around this as much as we can.
Findings/learnings	Relatively small amounts of funding can assure volunteer-based project of ongoing commitment that can be difficult

otherwise.
The existence of this Shiny server, and availability to NZ Shiny developers and R users can be usefully publicised. The Horizons Council/MfE application is probably the first effort to deploy a genuine internet based linked-data application for councils to share data, and one of the first public uses of Shiny for this purpose by any NZ agency. This server, and this application I suggest are media-worthy for Internet NZ.
See: <u>https://shiny.nzoss.org.nz/nz_shiny_river_</u> <u>app/</u>
Note: the slow startup is caused by the application connecting to multiple regional council web services, and is dependent on their response times. It is not optimised for performance, but is a prototype for a possible e-IDI capability, as described by MfE at: https://www.mfe.govt.nz/more/data/e-idi- %E2%80%93-real-time-environmental-data- one-spot